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ABSTRACT

This fact sheet contains preliminary results from a General Accounting Office (GAO) survey of selected high-quality early childhood education (ECE) centers. To gather data, questionnaires were sent to directors of 265 full-day, full-year preschool and early childhood education programs accredited by the National Association for the Education of Young Children (NAEYC). Data used in these analyses represent tabulations for 158 of the centers. Sections of the report concern cost per child, teacher salaries, insurance costs, costs of supplementary services, and number of religiously affiliated centers. Appendices provide a comparison of selected requirments (S. 123 criteria and NAEYC standards) for early childhood education programs; objectives, scope, and methodology of the survey; ECE centers' expense categories as a proportion of total costs; summary data on teacher salaries; and summary data on the costs of supplementary services. (RH)

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Fact Sheet for the Chairman, Committee on Labor and Human Resources, U.S. Senate

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July 1989

EARLY CHILDHOOD EDUCATION

Information on Costs and Services at High-Quality Centers

PS 018427

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GAO

United States
General Accounting Office
Washington, D.C. 20548

Human Resources Division

B-236126

July 21, 1989

The Honorable Edward M. Kennedy
Chairman, Committee on Labor
and Human Resources
United States Senate

Dear Mr. Chairman:

We are preparing a comprehensive report, to be issued later this year, in response to your request for information on the costs of providing high-quality early childhood education. This fact sheet contains preliminary results from a survey we did of selected high-quality early childhood education centers.

These results are for use during ongoing congressional deliberations on your proposed Smart Start bill (S. 123)--to provide financial assistance to state and local high-quality early childhood education programs for prekindergarten aged children (primarily 4-year-olds.) If the bill is enacted as currently proposed, Smart Start programs would operate on a full-day, full-calendar year basis and be required to meet certain minimum standards. At least 67 percent of the funds appropriated under this bill would be targeted to centers that serve low-income children.

To collect information on fiscal year 1988 costs and services of high-quality early childhood education programs, we sent questionnaires to directors of the 265 full-day, full-year preschool and early childhood education programs accredited by the National Association for the Education of Young Children (NAEYC). NAEYC provides the only national voluntary accreditation system for early childhood education centers and schools; its accreditation standards are similar to program criteria in S. 123 (see app. I).

As of July 5, 1989, 78 percent of the 265 centers in our survey had returned responses to the questionnaire. Because of time limitations associated with the issuance of this fact sheet by mid-July, the data represent tabulations for 158 (60 percent) of the 265 centers. We believe that the information obtained from the 158 centers provides a reasonable

indication of the costs for high-quality early childhood education; however, the data are not necessarily representative of costs nationwide. (See app. II for a more detailed description of our objectives, scope, and methodology.)

COST PER CHILD

As shown in table 1, on average, early childhood education centers reported a cost per child of $4,070 in fiscal year 1988. However, after adjusting for in-kind donations,[1] we estimate an average cost per child of $4,660. The cost per child is lowest in the West and highest in the Northeast.

Table 1: Average Annual Cost per Child Reported by NAEYC Centers (Fiscal Year 1988)

Average NAEYC center costs per child	Nation	Regions			
		Northeast	Midwest	South	West
Costs reported by NAEYC centers	$4,070	$4,819	$4,174	$3,940	$3,570
Estimated costs if no in-kind donations were received	4,660	5,518	4,600	4,655	4,192

[1]On the basis of information provided by centers, we added to centers' reported costs the value of in-kind donations, including rent, labor, supplies, equipment, and supplementary services. For those centers that reported no rent or insurance costs--costs essential for operating an early childhood education center--and indicated no value for donations of rent and insurance, we estimated rent and insurance costs (by determining the average for those centers reporting such costs).

It is possible that our cost per child estimate will change when all questionnaire responses are analyzed. At the centers in our survey, the average child-teacher ratio reported for 4-year old children was about 9:1, and, at many of these centers, the ratios for infants and toddlers were closer to 4:1. Our final report will include more analysis, which may allow us to estimate the change in cost per child that would occur if the ratio for 4-year-olds was closer to the 10:1 ratio set as a maximum in the proposed legislation. Preliminary results of this analysis suggest that cost per child would be lower by between $100 and $300 with the higher child-teacher ratio. This adjustment would result in a nationwide average cost per child of $3,800 to $4,000, assuming in-kind donations were continued at current levels, or an average cost of $4,400 to $4,600 if no donations were received.

More than three-fourths of center expenses were for (1) salaries and benefits and (2) rent or mortgage (see app. III). Other costs were for additional operating expenses--such as educational materials and equipment, food, office supplies, repairs and maintenance, insurance, and utilities--and supplementary services, such as health screening and parent education.

TEACHER SALARIES

We estimate that on average in fiscal year 1988, the annual salary for early childhood education teachers at NAEYC centers was about $13,700 compared with $27,400 for public school elementary teachers. Early childhood education salaries were approximately half those paid to public elementary school teachers in each of the nation's four regions (see app. IV, table IV.1). We found that the average salary for early childhood education teachers with at least bachelor's degrees was about $14,530, whereas the estimated salary for public school teachers with 6.4 years of experience (the average for early childhood education teachers in our survey) was about $21,500.[2] In addition,

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[2]On average, public school elementary teachers have approximately 14 years of teaching experience, compared with 6.4 years for the early childhood education teachers in our survey. In addition, although for the most part all public school teachers have at least bachelor's degrees, only half of all early childhood education teachers have at least bachelor's degrees.

salaries of public elementary school teachers generally increased at a greater rate with years of experience than did salaries of early childhood education teachers with bachelor's degrees (see app. IV, fig. IV.1).

INSURANCE COSTS

Overall, of the centers we surveyed, those that reported paying insurance costs paid an average of about $5,630 in fiscal year 1988. This represented an average cost per child of $82. Insurance costs primarily include coverage for liability (such as bodily injury, property damage, and personal injury), real property, personal property, theft, and employee dishonesty. The average per child cost of insurance decreased as the size of the center increased. For example, insurance costs for centers with 50 children or fewer averaged $88 per child compared with $78 per child for those centers with more than 100 children.

COSTS OF SUPPLEMENTARY SERVICES

S. 123 requires certain supplementary services, including health screening; screening for handicapping conditions; referrals to health, mental health, and social service agencies; and parent education and family support services. NAEYC centers annually paid, on average, $60 per child for these required supplementary services (see app. V, table V.1). Overall, the cost per child for the required supplementary services made up about 1.3 per cent of the centers' total cost per child. The NAEYC centers often provided additional services, such as transportation, not required under S. 123 (see app. V, table V.2).

NUMBER OF RELIGIOUSLY AFFILIATED CENTERS

Twenty-three percent of the 158 centers reported that they are located in churches or synagogues, and 20 percent reported that they are religiously affiliated. We defined a religiously affiliated center as one in which a religious organization (1) is involved in the center's administration or (2) has control over the content or structure of the program, the hiring of personnel, or the selection of children.

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Unless you publicly announce its contents earlier, we plan no further distribution of this fact sheet for 10 days. At that time, copies will be made available to other interested parties. Major contributors to this fact sheet are listed in appendix VI.

Sincerely yours,

William J. Gainer
Director of Education
and Employment Issues

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Abbreviations

NAEYC National Association for the Education of Young Children
NEA National Education Association

Appendix I

COMPARISON OF SELECTED REQUIREMENTS FOR EARLY CHILDHOOD EDUCATION PROGRAMS: S. 123 CRITERIA AND NAEYC STANDARDS

Program requirement	S. 123 criteria	NAEYC standards
Curriculum	Developmentally appropriate for the child's age and all areas of the child's development, including development, including educational cognitive, physical, emotional, and social	Developmentally appropriate activities and materials that are selected to emphasize experimental learning
Child-staff ratio for 4-year olds	10 to 1	10 to 1
Maximum group size	20 children	20 children
Staff qualifications:		
Teachers	State certification in early childhood education or child development, if available; nationally recognized child development credential; or college degree with significant coursework in early childhood education	Associate degree in early childhood education (or child development) or nationally recognized child development credential
Assistant teachers	40 hours of preservice training	High school degree and processional development
In-service training	24 hours annually	Required, but no minimum number of hours established
Meals	Must provide adequate and nutritious meals, including breakfast at parent request	Must ensure that children receive nutritious meals, but not required to provide them
Supplementary services	Must provide screening for handicapping conditions and health problems, information referral services, and parent education	Must provide health and social service referrals as well as developmental assessments of children
Health and safety	Comply with applicable state and local laws and federal and state standards	Comply with applicable state and local program requirements; staff trained to detect illness and at least one member trained in emergency aid

OBJECTIVES, SCOPE, AND METHODOLOGY

In response to a request from the Chairman, Senate Labor and Human Resources Committee, we obtained information on the costs of providing high-quality early childhood education. In discussions with the Committee staff, we agreed that to best assist the Committee in its ongoing deliberations over S. 123 (Smart Start: The Community Collaborative for Early Childhood Development Act of 1989) and other pending child care legislation, we would focus on

-- the average annual cost per child of providing high-quality early childhood education;

-- the average annual salary for early childhood education teachers compared with that of public school teachers;

-- the average annual cost per child for insurance at early childhood education centers;

-- the average annual cost per child of providing supplementary services required under S. 123; and

-- the proportion of centers surveyed that were religiously affiliated or located in churches, synagogues, or other religious organizations.

To collect information on costs and services of high-quality early childhood education programs, we sent copies of the questionnaire to directors of all of the 265 full-day, full-year preschool and early childhood education programs accredited by the National Association for the Education of Young Children (NAEYC),[1] as of October 1988. In total, as of October 1988, there were 658 programs accredited by NAEYC. (We did not survey those accredited programs that operated only on a part-day or part-year basis or served school aged-children only.) The 265 full-day programs surveyed may serve children on a part-time or full-time basis.

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[1]Excludes 20 of 28 centers that were part of 8 programs that operated more than one center. In order that these programs' administrators would not be burdened with completing questionnaires for multiple centers, we asked that each of the 8 administrators complete a questionnaire for the largest center serving 4-year-olds in their program.

NAEYC, a membership organization of more than 70,000 professionals in the field of child development and early childhood education, provides the only national voluntary accreditation system that is exclusively for all types of early childhood centers and schools. We surveyed NAEYC-accredited programs because many of NAEYC's accreditation standards are similar to program criteria in S. 123 (see app. I). Thus, we believe the costs of NAEYC-accredited programs would most likely be similar to the costs of programs funded under the proposed Smart Start bill. For example, both S. 123 criteria and NAEYC's standards require a maximum child-teacher ratio of 10:1, a developmentally appropriate curriculum, and properly trained staff.

Our questionnaire asked respondents to report information on center costs, services, and children served for fiscal year 1988. As of July 5, 1989, 78 percent of the 265 centers in our survey had returned copies of the questionnaire. However, data in this fact sheet represent tabulations for 158 (60 percent) of the 265 centers because of time limitations encountered in issuing this product by mid-July 1989.[2] In addition, because 3 of the 158 centers did not provide complete information on teachers' salaries, we excluded them from our analyses of average teacher salaries and average cost per child.

We visited five centers to (1) verify questionnaire responses and (2) test the feasibility of respondents' providing accurate data. We telephoned all other respondents to follow up on their questionnaire responses, particularly those responses relating to salaries and other center costs.

We determined average annual center costs per child by region. For determining regional costs, we used the four geographical regions--the Northeast, Midwest, South, and West--designated by the Bureau of the Census.

We believe that information obtained from the centers provides reliable data for developing a reasonable estimate of the cost per child of providing high-quality education. However, because these centers may not be statistically representative of all high-quality early childhood education centers in the nation, the data are not necessarily representative of costs nationwide.

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[2]It is possible that our results will change when all of our questionnaire responses are analyzed.

We based our calculation of average cost per child on centers' reported enrollment of full-time and part-time children. We determined that for 35 centers in our survey, on average, part-time children attended their centers 42 per cent of the time that full-time children attended. We, therefore, weighted part-time children accordingly when calculating the cost per child.

Many centers we surveyed indicated that they received in-kind donations, which reduced outlays they would otherwise have had to make for items such as rent and repairs, equipment and materials, and supplementary services. Therefore, we included donations received by centers in calculating average cost per child. To calculate a center's cost per child including donations, we added to the center's reported cost per child the value of the donations as estimated by the center. To the extent that in-kind donations continue to be obtained by centers to the same degree in the future as they have been in the past, our estimate of average annual cost per child, which includes the value of donated services, overestimates the actual costs that will be borne directly by centers.

In addition, many centers reported no expenditures for occupancy (rent or mortgage) or insurance -- costs necessary for operating an early childhood education center -- and did not indicate whether these items were donated or, if donations were received, the value of the donations. To correct for a possible underestimation of costs for these centers, we estimated insurance and occupancy costs by determining the average for those centers reporting such costs.

For example, centers that occupy space owned by the center and for which the mortgage has been paid off might have reported no expenditures for occupancy. The cost of the space, in this case, is the rent foregone that could have been earned if the space was rented to others. Again, as in the case of in-kind donations, our estimate of cost per child, which includes the estimated value of the space and insurance coverage, overstates the costs that would be borne directly by centers.

We compared early childhood education teacher salaries with those of public elementary school teachers nationwide, by region, and by levels of experience and education (see app. IV).[3] To obtain

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[3] For the purpose of this comparison, we used only salary data reported for those early childhood education teachers working 35 or more hours per week. Of all public school elementary teachers, 11 percent worked part-time.

comparable data on public school teacher salaries, we used data in Estimates of School Statistics: 1987-88, collected from states by the National Education Association (NEA). According to NEA's manager of research services, these estimates are determined by dividing the total salaries for elementary school teachers by the number of public elementary school teachers for each state. To determine an average salary for the nation as a whole and for the regions in which these states are located, we, in turn, weighted state averages by the numbers of those teachers in each state.

In addition, we compared the average salaries of those early childhood education teachers with bachelor's degrees and various experience with estimates of average salaries of public school elementary teachers with similar experience (see fig. IV.1). Because the only data on individual public elementary school teachers available with this amount of detail were for school year 1984-85, we adjusted the salary levels using average salary increases from school year 1984-85 to 1987-88 as reported by NEA. We used regression analysis to estimate public elementary school teacher salaries for certain educational levels and ranges of years of experience.[4] However, we did not compare early childhood education teacher salaries with those of private elementary school teachers because comparable data were not available.

To determine center cost for insurance, we averaged the costs of the 125 centers in our survey that reported such costs. The other 33 centers reported no costs for insurance. Presumably, their insurance costs were paid by their program sponsors, for example, churches, public school systems, or hospitals. We determined the average center cost for each of the four supplementary services required under S.123 and three other supplementary services not required (see app. V, tables V.1 and V.2). To determine center cost for each supplementary service, we averaged the costs of the centers in our survey that reported

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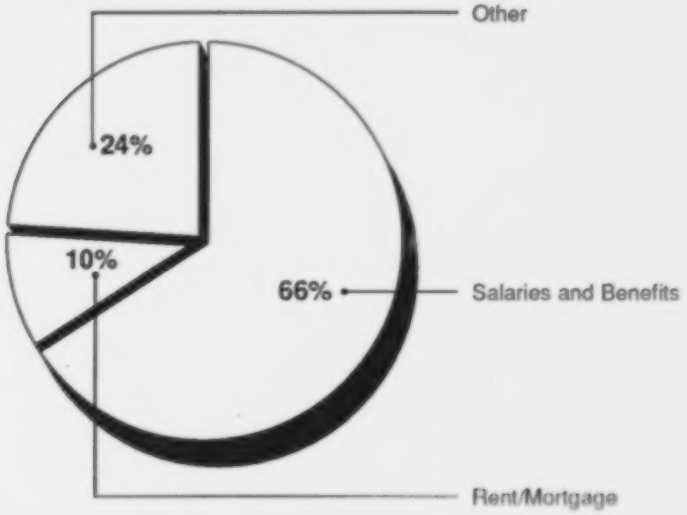
[4]The data on roughly 3,400 public elementary school teachers were obtained from the 1985 Public School Survey conducted by the Department of Education's National Center for Education Statistics. The regressions included salary estimates as they related to education level; years of experience; and demographic, geographic, and workload characteristics. For teachers with bachelor's degrees in education, we estimated salaries using various experience levels and mean values for other variables in the regression.

such costs or indicated the value of in-kind donations received for that service.

To identify which centers we surveyed were religiously affiliated, we defined a "religiously affiliated" center as one in which a religious organization is involved in the center's administration or has control over the content or structure of the program, the hiring of personnel, or the selection of children.

EARLY CHILDHOOD EDUCATION CENTERS' EXPENSE CATEGORIES AS A PROPORTION OF TOTAL COSTS



Total Costs: $298,284

Note: "Other" includes educational materials and equipment, insurance, office supplies, repairs and maintenance, utilities, supplementary services, food, and additional operating expenses.

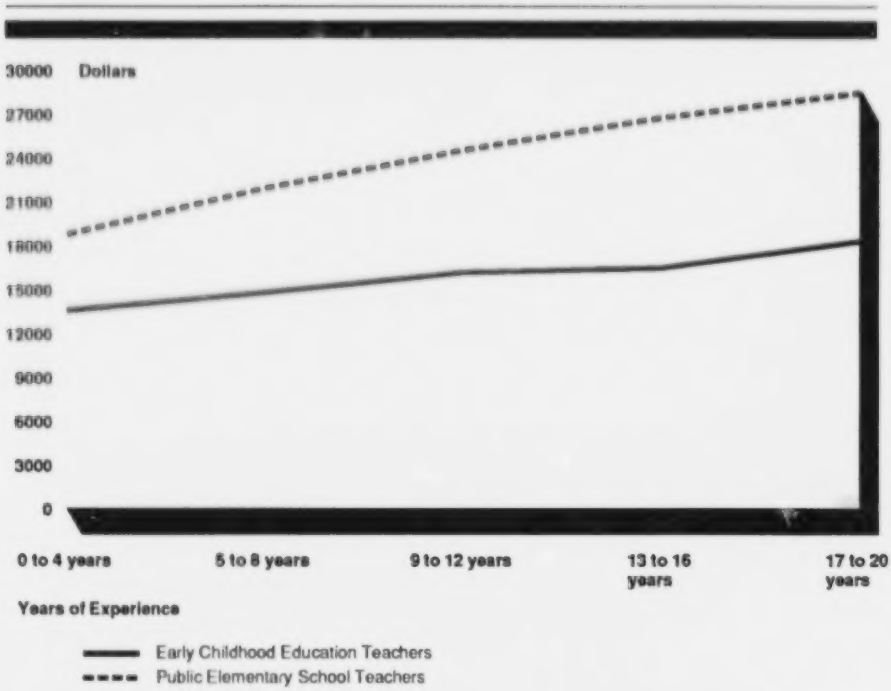
SUMMARY DATA ON TEACHER SALARIES

Table IV.1: Early Childhood Education Teacher Salaries Compared With Those of Public Elementary School Teachers (Fiscal Year 1988)

Region	Teachers: Early childhood education	Teachers: Public elementary school[a]
Northeast	$15,560	$30,150
Midwest	13,700	27,760
South	13,650	24,500
West	12,440	29,600

[a]Source: Estimates of School Statistics: 1987-88, National Education Association.

Figure IV.1:
Salary Comparisons by Varying Years of Experience for Early Childhood Education Teachers and Public Elementary School Teachers With Bachelor's Degrees



Note: These estimates were obtained from multiple regression analysis, for public elementary school teachers only, using data from the 1985 Public School Survey, conducted by the National Center for Education Statistics.

SUMMARY DATA ON THE COSTS OF SUPPLEMENTARY SERVICES

Table V.1: Reported Annual Costs of Supplementary Services Required by S. 123

Services required by S. 123	Average center cost	Average cost per child	Centers providing service (in percent)
Parent education/ family support	$ 458	$ 7	52
Information/ referral for health and social services	1,259	22	18
Health screening	1,603	17	35
Screening for handicapping conditions	1,279	14	12
Total	$4,599	$60	

Table V.2:
Reported Annual Costs of Supplementary Services Other Than Those Required in S. 123

Other supplementary services	Total center cost	Average cost per child	Centers providing service (in percent)
Mental health services	$1,858	$23	15
Direct social services	1,260	16	9
Transportation	5,224	54	20
Total	$8,342	$93	

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